SO-SFP-155M-L80D
SFP, 100/155Mbps, 1550nm, SM, DDM, 29dB, 80 km

OVERVIEW

SO-SFP-155M-L80D is a 1550nm SFP transceiver for SingleMode (SM) fiber for 155 Mbps SDH/SONET and 100M Fast Ethernet services. The optical performance provides a bridgeable distance of up to 80 km.

This transceiver provides digital diagnostic functions via a 2-wire serial interface as defined by the SFF-8472 specification.

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Technology</th>
<th>Grey SFP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission media</td>
<td>SM (2x LC)</td>
</tr>
<tr>
<td>Typical reach</td>
<td>80 km</td>
</tr>
<tr>
<td>Nominal wavelength</td>
<td>1550 nm</td>
</tr>
<tr>
<td>Bit rate range</td>
<td>125 / 155.520 Mbps</td>
</tr>
<tr>
<td>Protocols</td>
<td>Eth: 100M Ethernet (FE) SDH/SONET: STM-1/OC-3</td>
</tr>
<tr>
<td>Power budget</td>
<td>10 - 34 dB ⪯</td>
</tr>
<tr>
<td>Dispersion tolerance</td>
<td>1600 ps/nm</td>
</tr>
<tr>
<td>Dispersion penalty</td>
<td>1 dB</td>
</tr>
<tr>
<td>Temperature range</td>
<td>0°C to +70°C</td>
</tr>
<tr>
<td>Power consumption</td>
<td>&lt; 1.0W</td>
</tr>
</tbody>
</table>

Transmitter data

| Output power:        | Min: -5.0 dBm Max: 0.0 dBm |
| Tx wavelength:       | Min: 1480 nm Max: 1560 nm |
| Receiver data        | Minimum input power: -34.0 dBm ⪯ |
| Overload (max power):| -10.0 dBm                |
| Wavelength range     | 1260 - 1600 nm            |
| DDM                  | Yes                        |
| MSA compliance       | SFP MSA SFF-8472           |

1) @ 155 Mbps & BER 1E-12

REGULATORY COMPLIANCE

EMC CE          EN 55022:2010
                EN 55024:2010
UL/Safety       UL 60950-1
FCC             47 CFR PART 15 OCT, 2013
RoHS            RoHS 6
TUV             EN 60950-1:2006+A11+A1+A12+A2
                EN 60825-1:2014
                EN 60825-2:2004+A1+A2

Storage temp.   -40°C to +85°C

Note! See “Definitions” below.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO-SFP-155M-L80D</td>
<td>SFP, 100/155Mbps, 1550nm, SM, DDM, 29dB, 80km</td>
</tr>
</tbody>
</table>
DEFINITIONS

Technology:  
Grey; Transceiver type for non-WDM applications. Electrical or optical.  
CWDM; Transceiver type for CWDM applications using G.694.2 channel grid.  
DWDM; Transceiver type for DWDM applications using G.694.1 channel grid.  
BiDi; Transceiver pair using two different wavelength channels operating on a single-fiber.  
DAC; Direct Attach Cable (DAC). Electrical or optical cable with attached connectors.

Transmission Media:  
Type of fiber, e.g. Multimode (MM) or Singlemode (SM). Number of and connector type within brackets (e.g. 2x LC, 1 x MPO).

Typical reach:  
Nominal distance performance based on dispersion and power budget properties, i.e. w/o dispersion compensation and optical amplification.

Bit rate range:  
Supported bit rate range in Gigabit or Megabit per second (Gbps or Mbps).

Protocols:  
Protocols within supported bit rate range.

Nominal wavelength:  
Typical wavelength from transmitter.

Interface standards:  
Referenced interface standards e.g. IEEE 802.3 standard for 10GbE services.

Power budget:  
Min and max power budget between Transmitter and Receiver. Excluding any dispersion penalty.

Dispersion tolerance/penalty:  
Maximum amount of tolerated dispersion and required reduction of power budget to maintain BER better than 1E-12. Defined at a specific bit rate.

Temperature range:  
Max operating case temperature range.

Standard temperature range: typically 0°C to +70°C (32°F to +158°F)  
Extended temperature range ([temp]): typically -20°C to +75°C (-4°F to +167°F)  
Industrial temperature range ([temp]): -40°C to +85°C (-40°F to +185°F)

Power consumption:  
Worst case power consumption.

Transmitter Output power:  
Average output power. Provided in min and max values.

Receiver minimum input power:  
Minimum average input power at specified BER, normally 1E-12.

Receiver max input power:  
Maximum average input power giving a BER, normally 1E-12.

DDM:  
Digital Diagnostic Monitoring functionality as defined in SFF-8472 MSA.